

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
27 May 2004 (27.05.2004)

PCT

(10) International Publication Number
WO 2004/044097 A1

(51) International Patent Classification⁷: **C10G 45/58**,
45/60, 45/64, B01J 29/40, 29/44, 29/70, 29/74, 29/80

Cross Road, Pittstown, NJ 08867 (US). **LINEK, Sandra, J.** [CA/US]; 11 Alexandria Drive, East Hanover, NJ 08867 (US). **BAUMGARTNER, Joseph, E.** [US/US]; 179 Raritan River Road, Califon, NJ 07830 (US).

(21) International Application Number:
PCT/US2002/036521

(74) Agents: **HUGHES, Gerard, J.** et al.; ExxonMobil Research and Engineering Co., 1545 Route 22 East, P.O. Box 900, Annandale, NJ 08801-0900 (US).

(22) International Filing Date:
12 November 2002 (12.11.2002)

(25) Filing Language: English

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(26) Publication Language: English

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:
US 09/601,867 (CIP)
Filed on 2 October 2000 (02.10.2000)

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): **EXXON-MOBIL RESEARCH AND ENGINEERING COMPANY** [US/US]; 1545 Route 22 East, P.O. Box 900, Annandale, NJ 08801-0900 (US).

(72) Inventors; and

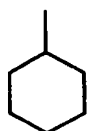
(75) Inventors/Applicants (*for US only*): **MURPHY, William, J.** [CA/US]; 16445 Coliseum Avenue, Baton Rouge, LA 70816 (US). **MCVICKER, Gary, B.** [US/US]; 65 Main Street, P.O. Box 427, Califon, NJ 07830 (US). **HANTZER, Sylvain, S.** [FR/US]; 37620 Seven Oaks Avenue, Prairieville, LA 70769 (US). **CODY, Ian, A.** [CA/US]; 7942C Wrenwood Boulevard, Baton Rouge, LA 70809 (US). **SOLED, Stuart, L.** [US/US]; 21 Cooks

Published:

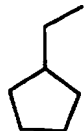
- with international search report
- with amended claims

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

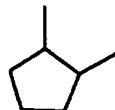
(54) Title: PROCESS FOR MAKING A LUBE BASESTOCK



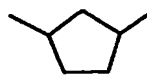
MCH



ECP



1,2 DMCP



1,3 DMCP



1,1 DMC

(57) Abstract: A method for hydroisomerizing a waxy feed to favor one of VI or yield is described. The method uses a unitized pellet powder catalyst comprising a metal hydrogenation component, a first catalytic component selected from 8, 10 and 12 ring molecular sieves and mixtures thereof, and a second amorphous isomerization component which is an amorphous inorganic oxide. Importantly, the ratio of feed and second components are present in a predetermined ratio to provide a preselected acidity favoring one of VI or yield resulting from the hydroisomerization.